

Remarks

Applicant has reviewed the Office Action dated as mailed May 17, 2006. After the above amendments have been made, the present application contains claims 1-4, 6-17, 19-32, 34, and 35-39. Claims 3, 4, 6, 12, 19, 21, 23, 32 and 34 have been amended. Claim 26 has been canceled. New claims 35-39 have been added.

Claim Rejections Under 35 U.S.C. §103

Claims 1-4, 8, 10-11, 13-14, 16-17, 21-27 and 30-32 were rejected under 35 U.S.C. §103(a) as being unpatentable over Brederveld et al., European Patent EP 0 605 989A1 (hereinafter Brederveld) and further in view of Ostberg et al., U.S. Patent Pub. 2004/0203839 A1 (hereinafter Ostberg). This rejection is respectfully traversed. Claim 1 recites:

“receiving a second quality indicator for the same channel after a predetermined time period in response to the first quality indicator being below a predetermined threshold value; scanning any channels in a channel scan list in response to the second quality indicator being below the predetermined threshold value...”

In contrast, Brederveld referring to Figures 5A and 5B recites in column 5 beginning at line 7:

“...It is then determined whether or not this communications quality value is above or below a first predetermined threshold value TH1. If above, the flowchart returns to block 104 via arrow 110. If below, the flowchart moves to block 112, which shows that the mobile station 20 changes to a search mode of operation. In the search mode of operation, the receiver portion of the transceiver 30 (Fig. 2) switches to a so-called cell-promiscuous mode of operation, in which beacon messages from any of the base stations 16 may be received and processed...”

Assume as shown in block 116, that the first beacon message 70 received by the mobile station 20 in the search mode is from base station X. As shown in block 118, the communications quality of this beacon message is measured by the communications quality measurement circuit 42 (Fig. 2) as described hereinabove...”

And then continuing in line 32 Brederveld recites:

“...A determination is then made as to whether or not this communications quality value is above a second predetermined threshold value TH2 (block 120). If below, then the flowchart proceeds as shown via line 122 to block 116, and the next beacon message from a

base station 16 is awaited. If above, then the flowchart proceeds to block 123 where it is determined whether the base station X is or is not the current base station. If base station X is not the current base station, then the mobile station 20 switches to the new base station, i.e. switches to a state wherein messages having the network ID of the new base station are processed (block 124), and the receiver is returned from the cell-promiscuous mode to the normal mode (block 126). The flowchart then return to block 104 as shown by line 128. If base station X is the current base station, the flowchart process *[proceeds]* directly via line 130 to block 126, and the receiver returns to normal mode operation, in communication with the current base station 16.”

Accordingly, Brederveld teaches that the communications device switches into a search mode (block 112 in Figure 5A) and cell-promiscuous mode (block 114) after a first communications indicator below a first predetermined threshold TH1 (block 108) and before a second communications quality indicator is received as clearly show in Figures 5A and 5B and recited from Brederveld above. Furthermore, the second communications quality indicator is evaluated relative to a second predetermined threshold TH2 (block 120), different from the first threshold TH1 (block 108). Accordingly, Brederveld and Ostberg do not teach or suggest scanning any channels in a channel scan list after receiving the second quality indicator as required by the present invention as recited in claim 1. Nor do Brederveld and Ostberg teach or suggest scanning after receiving the second quality indicator that is also below the same predetermined threshold value as the first quality indicator as provided by the present invention as recited in claim 1. For all of these reasons, Applicant respectfully submits that claim 1 is patentably distinguishable over Brederveld and Ostberg, whether considered individually or combined, and reconsideration and withdraw of the 35 U.S.C. §103 rejection of claim 1 is respectfully solicited.

With respect to the rejection of independent claims 16 and 30 as being unpatentable over Brederveld in view of Ostberg, claims 16 and 30 recite features similar to independent claim 1. Therefore, claims 16 and 30 are also submitted to be patentably distinguishable over Brederveld and Ostberg, whether considered individually or combined, for the same reasons as discussed with respect to claim 1. Reconsideration and withdraw of the 35 U.S.C. §103(a) rejection of claims 16 and 30 is also respectfully solicited.

Turning now to the rejection of claims 3, 4, 21 and 32 as being unpatentable over Brederveld in view of Ostberg, claim 3 has been amended to recite:

“wherein scanning any channels in the channel scan list comprises skipping any channels on a grey zone channel list to avoid a failure of a page response or access attempt on a reverse link from a mobile communication device to a base station.”

Claims 4, 21 and 32 have been amended to recite similar features. Applicant respectfully submits that neither Brederveld nor Ostberg teach or suggest a grey zone channel list let alone skipping any channels on a grey zone channel list during scanning. Nor do Brederveld or Ostberg teach or suggest skipping any channels on a grey zone channel list to avoid a failure of a page response or access attempt on a reverse link from a mobile communication device to a base station as provided by the present invention as recited in amended claims 3, 4, 21 and 32. Additionally, claims 3 and 4 depend directly from independent claim 1, claim 21 depends directly from independent claim 16 and claim 32 depends directly from independent claim 30. Because of these dependencies, these claims contain all of the features of the referenced base claim. As discussed above, independent claims 1, 16 and 30 are patentably distinguishable over Brederveld and Ostberg. Therefore, Applicant respectfully submits claims 3, 4, 21 and 32 are also patentably distinguishably over Brederveld and Ostberg for all of the reasons discussed. Reconsideration and withdraw of the Section 103 rejection of these claims is respectfully solicited.

Regarding the rejection of claims 8, 10, 11, 13, and 14 under 35 U.S.C. §103(a) as being unpatentable over Brederveld in view of Ostberg, these claims recite additional features which further patentably distinguish over Brederveld and Ostberg. Additionally, these claims depend either directly or indirectly from independent claim 1, and by virtue of that dependency, contain all of the features of independent claim 1. Therefore, these claims are also submitted to be patentably distinguishable over Brederveld and Ostberg, whether considered individually or combined, and reconsideration and withdraw of the 35 U.S.C. §103 rejection of these claims is respectfully solicited.

With respect to the rejection of claims 17 and 22 under 35 U.S.C. §103 as being unpatentable over Brederveld in view of Ostberg, as clearly indicated in Figure 5A of Brederveld and recited above from column 5 of Brederveld, Brederveld teaches that the communications station enters the search mode (block 112) and switches the receiver to the cell-promiscuous mode (block 114) in response to receiving a first communications quality indicator below the first predetermined threshold TH1 (block 108). Brederveld does not teach or suggest performing an initial acquisition

scan in response to failing to acquire another communications system as provide by the present invention as recited in claim 17, or after terminating a telephone call originated before acquiring the other system, as provided by the present invention as recited in claim 22. Additionally, claims 17 and 22 depend directly from independent claim 16. Because of this dependency, these claims contain all of the features of independent claim 16. Therefore, claims 17 and 22 are also submitted to be patentably distinguishable over Brederveld and Ostberg, whether considered individually or combined, and reconsideration and withdraw of the 35 U.S.C. §103 rejection of these claims is respectfully requested.

Turning now to the rejection of independent claim 23 as being unpatentable over Brederveld in view of Ostberg, claim 23 has been amended to recite:

“a grey zone channel list, wherein the grey zone channel list includes any channels where the first quality indicator and the second quality indicator are below the predetermined threshold value to avoid failure of a page response or an access attempt on a reverse link from the communication device to a base station; and

a microprocessor adapted to cause scanning of any channels on the channel scan list and to skip any channels on the grey zone channel list in response to the second quality indicator of the channel being below the predetermined threshold value.”

Applicant respectfully submits that there is no teaching or suggestion in Brederveld or Ostberg of a grey zone channel list wherein the grey zone channel list includes any channels where the first quality indicator and the second quality indicator are below the predetermined threshold value to avoid failure of a page response or access attempt on a reverse link from the communication device to a base station as provided by the present invention as recited in amended claim 23. Furthermore, applicant respectfully submits there is no teaching or suggestion in Brederveld or Ostberg of a microprocessor adapted to cause scanning of any channels on the channel scan list and to skip any channels on the grey zone channel list in response to the second quality indicator of the channel also being below the same predetermined threshold value as also provided by the present invention as recited in amended claim 23. For all of these reasons, independent claim 23 is submitted to be patentably distinct over Brederveld and Ostberg, whether considered individually or combined, and reconsideration and withdraw of 35 U.S.C. §103 rejection of independent claim 23 is respectfully requested.

Regarding the rejection of claims 24 and 26 under 35 U.S.C. §103 as being unpatentable over Brederveld in view of Ostberg, claim 26 has been cancelled and claim 24 depends directly

from independent claim 23. Accordingly, claim 24 contains all of the features of claim 23. Claim 24 is, therefore, submitted to also be patentably distinguishable over Brederveld or Ostberg, and reconsideration and withdraw of the Section 103 rejection of claim 24 is respectfully solicited.

With respect to the rejection of claims 2, 25 and 31 under Section 103 as being unpatentable over Brederveld in view of Ostberg, claims 2 depends directly from independent claim 1, claim 25 depends directly from independent claim 23 and claim 31 depends directly from independent claim 30. Because of these dependencies, these claims contain all of the features of the referenced base claim. Accordingly, these claims are also submitted to be patentably distinguishable over Brederveld and Ostberg, and reconsideration and withdraw of the Section 103 rejection of these claims is respectfully solicited.

Claim 15 was rejected was under 35 U.S.C. §103(a) as being unpatentable over Brederveld and Ostberg as applied to claim 1 and further in view of U.S. Patent No. 6,047,071 to Shah (hereinafter “Shah”). Shah was cited for teaching a method for maintaining, changing, and/or updating a mobile phone parameters by a network service provider over the air. Applicant respectfully submits that the only motivation for combining Brederveld, Ostberg and Shah is the present invention which constitutes improper hindsight. Even if proper to combine the teachings of Brederveld, Ostberg and Shah, Applicant respectfully submits that they still would not provide the present invention as recited in claim 15. Claim 15 depends directly from independent claim 1. Shah adds nothing to the teachings of Brederveld and Ostberg so as to render independent claim 1 unpatentable. Therefore, Applicant respectfully submits that claim 15 is also patentably distinguishable over Brederveld, Ostberg and Shah, whether considered individually or combined. Reconsideration and withdraw of the Section 103 rejection of claim 15 is respectfully solicited.

Claims 6, 12, 19-20 and 34 were rejected under 35 U.S.C. §103(a) as being unpatentable over Brederveld and Ostberg as applied to claims 1, 16, 23 and 30, and further in view of U.S. Patent 6,496,531 to Kamel et al. (hereinafter “Kamel”). This rejection is respectfully traversed. Claim 6 has been amended to recite:

“adding the channel to a grey zone channel list in a mobile communication device in response to the second quality indicator signal being below the predetermined threshold value to avoid a grey zone condition, wherein the grey zone condition includes a degradation in a reverse link from the mobile communications device to a base station of the communication system.”

Claims 12, 19-20 and 34 have also been amended to recite features related to a grey zone channel list in a mobile communications device. Kamel was cited for teaching a method and system for controlling forward transmit power in spread-spectrum communication system such as a code-division multiple access (CDMA) system. Kamel was further cited for teaching that the mobile switching center determines whether to add a new pilot channel to service the control channel or if a data channel will be opted out. Applicant respectfully submits that there is no teaching or suggestion in Kamel of adding a channel to a grey zone channel list in a mobile communication device as provided by the present invention as recited in amended claims 6, 12, 19-20 and 34.

Additionally, claims 6 and 12 depend directly from independent claim 1, claims 19 and 20 depend either directly or indirectly from independent claim 16, and claim 34 depends directly from claim 30. Applicant respectfully submits that Kamel adds nothing to the teachings of Brederveld and Ostberg so as to render independent claims 1, 16 and 30 unpatentable. Therefore, Applicant respectfully submits that claims 6, 12, 19-20 and 34 are patentably distinguishable over Brederveld, Ostberg and Kamel, whether considered individually or combined, and reconsideration and withdraw of the 35 U.S.C. §103 rejection of these claims is respectfully solicited.

Claim 7 was rejected under 35 U.S.C. §103 as being unpatentable over Brederveld and Ostberg as applied to claim 1 and further in view of U.S. Patent 6,842,621 to Labun et al. (hereinafter "Labun"). This rejection is respectfully traversed. Claim 7 recites:

"starting a hysteresis timer in response to the first quality indicator being below the predetermined threshold value;
receiving the second quality indicator after the hysteresis timer expires and before scanning any channels in the channel scan list;..."

In contrast, Labun in column 9 beginning at line 22 and referring to Figure 5 recites:

"At step 510, the BRNC 506 is continuously monitoring the RSSI at the connected AP1 504. At step 512, the BRNC 506 set a timer when the RSSI of the MS 502 drops below the access point threshold value. The timer serves as a hysteresis timer to prevent a ping-pong handover effect that could occur if the MS 502 moves into an edge of a proximity or coverage area of AP1 504. At step 514, the BRNC 506 sends a disconnect command to the AP1 504 if the timer times out."

Accordingly, Labun teaches that the Bluetooth Radio Network Control (BRNC) continuously monitors RSSI and sends a disconnect command if the timer times out. Accordingly,

Labun does not teach or suggest receiving the second quality indicator after the hysteresis time expires as provided by the present invention as recited in claim 7.

Additionally, claim 7 depends from claim 1. As discussed above, claim 1 is submitted to be patentably distinguishable over Brederveld and Ostberg, whether considered individually or combined. Applicant respectfully submits that Labun adds nothing to the teachings of Brederveld and Ostberg so as to render independent claim 1 unpatentable. For all of the reasons discussed above, claim 7 is submitted to be patentable over Brederveld, Ostberg and Labun, and reconsideration and withdraw of the Section 103 rejection of claim 7 is respectfully solicited.

Claims 9 and 28-29 were rejected under 35 U.S.C. §103(a) as being unpatentable over Brederveld and Ostberg as applied to claims 1 and 23 and further in view of U.S. Patent 5,524,280 to Douthitt et al. (hereinafter "Douthitt"). As previously discussed claim 1 is submitted to be patentably distinguishable over the teachings of Brederveld and Ostberg. Douthitt was cited for teaching use of an initial scan timer for scanning a channel list to acquire a channel. Applicant respectfully submits that Douthitt adds nothing to the teachings of Brederveld and Ostberg so as to render independent claims 1 and 23 unpatentable. Therefore, applicant respectfully submits that claim 9 which depends directly from independent claim 1 and claims 28-29 which depend directly from independent claim 23, and by virtue of these dependencies contain all of the features of the referenced claim, are also patentably distinguishable over the combination of Brederveld, Ostberg and Douthitt. Reconsideration and withdraw of these Section 103 rejection of claims 9 and 28-29 are therefore, respectfully solicited.

New claim 35 recited, "preventing hopping between different channels by confirming that the first quality indicator remains below the predetermined threshold for the predetermined time period by receiving the second quality indicator from the same channel." Applicant respectfully submits that there is no teaching or suggestion in the documents of record of preventing hopping between different channels by confirmation that the first quality indicator remains below the predetermined threshold for the predetermined time period by receiving the second quality indicator from the same channel as provided by the present invention as recited in new claim 35.

Additionally, new claim 35 depends directly from independent claim 1, and because of this dependency contains all of the features of claim 1. Accordingly, applicant respectfully submits that

claim 35 is patentably distinct over the documents of record and allowance of claim 35 is respectfully solicited.

New claim 36 recites:

“adding the channel to a grey zone channel list in response to the second quality indicator signal being below a predetermined value, wherein the grey zone channel list includes any channels having a reverse link from a mobile communication device to a base station being degraded by interference from other communication devices;
scanning any channels in a channel scan list in response to the second quality indicator being below the predetermined threshold value; and
acquiring another channel from the channel scan list in response to the other channel having an associated quality indicator greater than or equal to the predetermined threshold value.”

Applicant respectfully submits that there is no teachings or suggestion in the documents of record of adding a channel to a grey zone channel list in response to the both a first and second quality indicator being below a predetermined value after a predetermined time period, wherein the grey zone channel list includes any channels having a reverse link from a mobile communications device to a base station being degraded by interference from other communications devices. Therefore, Applicant respectfully submits that new claim 36 is patentably distinct over the documents of record and allowance of claim 36 is respectfully solicited.

New claims 37, 38 and 39 recite additional features which further patentably distinguish over the documents of record. Additionally, these claims depend directly from independent claim 36, and by virtue of that dependency contain all of the features of claim 36. Therefore, these claims are also submitted to be patentably distinguishable over the documents of record, and allowance of these claims is respectfully submitted.

Conclusion

For the foregoing reasons, the Applicant respectfully submits that all of the claims in the present application are in condition for allowance. Reconsideration and withdrawal of the rejections and allowance of the claims at the earliest possible date are respectfully solicited.

If the Examiner has any questions about the present Amendment or anticipates finally rejecting any claim of the present application, a telephone interview is requested.

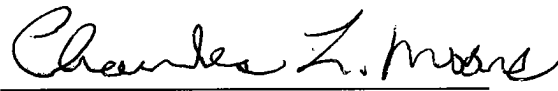
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Respectfully submitted,

Murali Narasimha, et al.
(Applicant)

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By:



Charles L. Moore
Registration No. 33,742
Moore & Van Allen, PLLC
P.O. Box 13706
Research Triangle Park, N.C. 27709
Telephone: (919) 286-8000
Facsimile: (919) 286-8199